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10/518,212	12/16/2004	Carl Christensen	PU020291	3542

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EXAMINER
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MATTIS, JASON E

ART UNIT	PAPER NUMBER
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2416

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12/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### **DETAILED ACTION**

1. This Advisory Action is in response to the Amendment After Final filed 11/14/08. Claims 1-18 are currently pending in the application.

#### ***Response to Arguments***

2. Applicant's arguments filed 11/14/08 have been fully considered but they are not persuasive.

First, it is noted that the claim set filed with the Amendment After Final of 11/14/08 appears to be incorrect. The previous set of claims filed on 5/13/08 included new claims 15-18; however the claims filed with this Amendment After Final do not include claims 15-18, nor do they indicate that these claims have been cancelled.

Regarding Applicant's argument that:

“While, for expediency purposes, it is not disputed herein that a router of Lydon may inherently have a routing engine, Lydon does not teach that routing engines of different routers are coupled by links in a full connected topology. Rather, Lydon simply discloses that routers themselves are connected by various links for input signal transmission” (See page 11 of Applicant's Remarks/Arguments filed 11/14/08)

the Examiner respectfully disagrees. As noted by the Applicant, Each of the routers 50, 60, 70, and 80 of Lydon et al. inherently must include a routing engine in order for the routers to be able to properly receive, process, and route data from an input to an

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output. Further, as also pointed out by the Applicant, Lydon et al. discloses that each of the routers 50, 60, 70, and 80 are connected by links in a fully connected topology (See column 4 line 48 to column 5 line 15 and Figure 4 of Lydon et al.). In order for the routers 50, 60, 70, and 80 to properly function as an expanded router, as taught by Lydon et al., the routing engines of the routers 50, 60, 70, and 80 also inherently must be connected to one another by the links connecting the routers in order for the routers to properly receive, process, and route data from an input of a first router to an output of a second router. Thus, Lydon et al. inherently discloses routers 50, 60, 70, and 80 including routing engines that are linked to one another in a fully connected topology, as claimed.

Regarding Applicant's argument that:

"Secondly, although Haq discloses the use of an active routing engine and a backup routing engine within a single router, the combination of Haq with Lydon would merely result in a router that has two internal routing engines. The combination would not in any way affect external links between routers or their components." (See page 11 of Applicant's

Remarks/Arguments filed 11/14/08)

the Examiner respectfully disagrees. Although the teachings of Haq et al. are used in the rejections to disclose a router having both an active routing engine and a backup routing engine, as discussed in the Applicant's arguments, it is the teachings of Lydon et al. that are used to disclose the manner in which the routing engines are connected to one another. As discussed in the rejections of the Final Office Action mailed 8/20/08, it

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would have been obvious to connect the backup routing engines disclosed by Haq et al. in the same manner that the routing engines of Lydon et al. are connected, such that the backup routing engines are connected to form the same type of fully connected topology as the active routing engines. Further, while it may be true that the combination of the teachings of Lydon et al. and Haq et al. may not affect the external links between the routers of Lydon et al., there is no limitation in the claims preventing the first, second, third, fourth, fifth, and sixth links from being the same links. For example, the one link connecting router 50 to router 60 could connect second backup routing engines, as disclosed by Haq et al., to one another, as well as connecting first routing engines, as disclosed by Lydon et al., to one another, thus making the one link perform the function of both the claimed first link and the claimed fourth link. Therefore, the rejection is based on a combination of using links to connect multiple routing engines together forming a fully connected topology, as taught by Lydon et al., with using active routing engines as well as backup routing engines, as taught by Haq et al., with the backup routing engines being connected together in the same manner as the active routing engines, as taught by Lydon et al. This combination is obvious since the use of backup routing engines, as taught by Haq et al. provides the advantage of protecting against the failure of a routing engine, and since connecting routing engines in the manner taught by Lydon et al. provides the advantage of allowing multiple routers to be linked together to form one expanded router having a greater number of inputs and outputs.

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Regarding Applicant's argument that Haq et al. does not disclose the use of redundant router matrices, the Examiner respectfully disagrees. Haq et al. discloses data being switched to either one of two routing engines 201 and 202 and either one of two processing components 205 and 206 (See column 3 lines 11-21 and Figure 2 of Haq et al.). Based on which routing engine and processing component are currently active, input packets are switched to one of the routing engines 201 or 202 and one of the processing components 205 and 206 using a different set of paths, and thereafter, the input packets are switched through routing engine 201 or 202 and processing component 205 or 206 to an output (See column 3 line 65 to column 4 line 43 and Figures 3 and 4 of Haq et al.). These different sets of paths that are used route input packets depending on which routing engine and processing component is currently active correspond to the claimed multiple first router matrix and second router matrix that is redundant to the first router matrix. Thus, Haq et al. does disclose a first router matrix and second router that is redundant to the first router matrix, as claimed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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